

Appendix table 5-11

Current fund expenditures for research equipment at academic institutions, by S&E field: Selected years, 1985–2012

Field	1985	1990	1995	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Current \$millions															
All fields	672	1,013	1,240	1,437	1,703	1,820	1,895	1,880	1,826	1,824	1,874	1,947	2,114	2,198	1,979
Science	548	792	968	1,131	1,340	1,435	1,502	1,442	1,382	1,396	1,439	1,470	1,603	1,629	1,423
Computer sciences	35	48	77	56	101	99	105	72	70	75	80	90	65	89	73
Environmental sciences	48	72	83	100	132	121	126	123	123	136	144	126	151	114	121
Atmospheric sciences	8	11	14	12	15	18	20	26	34	31	27	17	24	20	20
Earth sciences	18	27	27	37	33	42	43	44	35	36	39	47	52	46	53
Oceanography	16	20	28	34	74	50	41	40	44	62	70	52	58	31	29
Environmental sciences nec	5	13	15	17	11	11	22	13	10	7	9	11	17	16	19
Life sciences	283	420	464	630	737	819	836	826	752	737	796	786	906	934	812
Agricultural sciences	52	54	63	77	72	78	79	72	75	79	103	81	79	74	85
Biological sciences	105	171	192	269	296	337	348	326	302	272	303	299	395	390	330
Medical sciences	114	177	187	263	339	371	376	378	337	339	355	367	390	414	357
Life sciences nec	12	19	22	21	29	33	34	50	37	46	35	39	42	55	39
Mathematical sciences	6	10	14	10	10	8	8	9	9	9	9	9	8	7	7
Physical sciences	142	191	240	251	276	298	339	325	329	310	302	333	363	379	330
Astronomy	7	13	22	25	19	19	25	23	20	29	27	29	24	25	28
Chemistry	54	73	82	104	123	120	118	113	122	113	114	136	162	155	133
Physics	71	91	115	110	122	139	160	159	153	143	136	149	154	180	155
Physical sciences nec	10	14	22	13	12	20	36	30	34	25	25	20	24	18	14
Psychology	9	11	12	14	19	23	18	15	18	14	15	24	17	17	20
Social sciences	10	15	27	19	17	18	16	19	14	20	22	26	15	14	10
Economics	3	4	7	3	2	3	2	2	2	2	2	1	1	2	1
Political science	1	1	3	2	2	2	2	2	1	1	1	2	1	1	1
Sociology	2	3	4	3	4	3	2	3	2	3	2	5	2	2	1
Social sciences nec	4	7	12	11	9	9	9	12	8	15	16	18	10	9	6
Sciences nec	15	25	51	51	48	49	54	53	67	95	71	76	78	75	51
Engineering	124	220	272	306	364	385	394	439	443	428	435	475	511	570	556
Aeronautical/astronautical	7	13	17	20	24	22	22	21	24	24	35	28	35	34	33
Bioengineering/biomedical	NA	NA	NA	14	18	20	21	32	28	29	28	33	40	52	45
Chemical	11	18	22	26	30	32	57	41	43	40	41	50	53	56	54
Civil	10	20	22	29	43	31	39	35	34	34	36	38	38	51	42
Electrical	33	58	68	72	79	86	86	97	101	97	92	101	115	139	137
Mechanical	17	32	42	54	54	55	59	81	89	78	78	80	100	84	87
Metallurgical/materials	NA	27	28	30	41	61	40	53	57	56	53	60	51	52	60
Engineering nec	46	51	73	61	74	78	70	79	69	71	71	87	80	100	98
2005 constant \$millions															
All fields	1,088	1,405	1,515	1,615	1,847	1,927	1,957	1,880	1,766	1,713	1,720	1,762	1,896	1,933	1,709
Science	887	1,098	1,183	1,271	1,453	1,519	1,551	1,442	1,337	1,311	1,321	1,330	1,437	1,432	1,251
Computer sciences	57	67	94	63	110	105	108	72	68	70	73	81	58	78	64
Environmental sciences	78	100	101	112	143	128	130	123	119	128	132	114	135	100	106
Atmospheric sciences	13	15	17	13	16	19	21	26	33	29	25	15	22	18	18

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Field	1985	1990	1995	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Earth sciences	29	37	33	42	36	44	44	44	34	34	36	43	47	40	47
Oceanography	26	28	34	38	80	53	42	40	43	58	64	47	52	27	26
Environmental sciences nec	8	18	18	19	12	12	23	13	10	7	8	10	15	14	17
Life sciences	458	583	567	708	799	867	863	826	727	692	731	711	812	821	714
Agricultural sciences	84	75	77	87	78	83	82	72	73	74	95	73	71	65	75
Biological sciences	170	237	235	302	321	357	359	326	292	255	278	271	354	343	290
Medical sciences	185	245	228	296	368	393	388	378	326	318	326	332	350	364	314
Life sciences nec	19	26	27	24	31	35	35	50	36	43	32	35	38	48	34
Mathematical sciences	10	14	17	11	11	8	8	9	9	8	8	8	7	6	6
Physical sciences	230	265	293	282	299	315	350	325	318	291	277	301	326	333	290
Astronomy	11	18	27	28	21	20	26	23	19	27	25	26	22	22	25
Chemistry	87	101	100	117	133	127	122	113	118	106	105	123	145	136	117
Physics	115	126	141	124	132	147	165	159	148	134	125	135	138	158	136
Physical sciences nec	16	19	27	15	13	21	37	30	33	23	23	18	22	16	12
Psychology	15	15	15	16	21	24	19	15	17	13	14	22	15	15	18
Social sciences	16	21	33	21	18	19	17	19	14	19	20	24	13	12	9
Economics	5	6	9	3	2	3	2	2	2	2	2	1	1	2	1
Political science	2	1	4	2	2	2	2	2	1	1	1	2	1	1	1
Sociology	3	4	5	3	4	3	2	3	2	3	2	5	2	2	1
Social sciences nec	6	10	15	12	10	10	9	12	8	14	15	16	9	8	5
Sciences nec	24	35	62	57	52	52	56	53	65	89	65	69	70	66	45
Engineering	201	305	332	344	395	408	407	439	428	402	399	430	458	501	489
Aeronautical/astronautical	11	18	21	22	26	23	23	21	23	23	32	25	31	30	29
Bioengineering/biomedical	NA	NA	NA	16	20	21	22	32	27	27	26	30	36	46	40
Chemical	18	25	27	29	33	34	59	41	42	38	38	45	48	49	47
Civil	16	28	27	33	47	33	40	35	33	32	33	34	34	45	37
Electrical	53	80	83	81	86	91	89	97	98	91	84	91	103	122	120
Mechanical	28	44	51	61	59	58	61	81	86	73	72	72	90	74	77
Metallurgical/materials	NA	37	34	34	44	65	41	53	55	53	49	54	46	46	53
Engineering nec	74	71	89	69	80	83	72	79	67	67	65	79	72	88	86
Percent distribution															
All fields	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Science	81.5	78.2	78.1	78.7	78.7	78.8	79.3	76.7	75.7	76.5	76.8	75.5	75.8	74.1	71.9
Computer sciences	5.2	4.7	6.2	3.9	5.9	5.4	5.5	3.8	3.8	4.1	4.3	4.6	3.1	4.0	3.7
Environmental sciences	7.1	7.1	6.7	7.0	7.8	6.6	6.6	6.5	6.7	7.5	7.7	6.5	7.1	5.2	6.1
Atmospheric sciences	1.2	1.1	1.1	0.8	0.9	1.0	1.1	1.4	1.9	1.7	1.4	0.9	1.1	0.9	1.0
Earth sciences	2.7	2.7	2.2	2.6	1.9	2.3	2.3	2.3	1.9	2.0	2.1	2.4	2.5	2.1	2.7
Oceanography	2.4	2.0	2.3	2.4	4.3	2.7	2.2	2.1	2.4	3.4	3.7	2.7	2.7	1.4	1.5
Environmental sciences nec	0.7	1.3	1.2	1.2	0.6	0.6	1.2	0.7	0.5	0.4	0.5	0.6	0.8	0.7	1.0
Life sciences	42.1	41.5	37.4	43.8	43.3	45.0	44.1	43.9	41.2	40.4	42.5	40.4	42.9	42.5	41.0
Agricultural sciences	7.7	5.3	5.1	5.4	4.2	4.3	4.2	3.8	4.1	4.3	5.5	4.2	3.7	3.4	4.3
Biological sciences	15.6	16.9	15.5	18.7	17.4	18.5	18.4	17.3	16.5	14.9	16.2	15.4	18.7	17.7	16.7

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Field	1985	1990	1995	2000	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Medical sciences	17.0	17.5	15.1	18.3	19.9	20.4	19.8	20.1	18.5	18.6	18.9	18.8	18.4	18.8	18.0
Life sciences nec	1.8	1.9	1.8	1.5	1.7	1.8	1.8	2.7	2.0	2.5	1.9	2.0	2.0	2.5	2.0
Mathematical sciences	0.9	1.0	1.1	0.7	0.6	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.4	0.3	0.4
Physical sciences	21.1	18.9	19.4	17.5	16.2	16.4	17.9	17.3	18.0	17.0	16.1	17.1	17.2	17.2	16.7
Astronomy	1.0	1.3	1.8	1.7	1.1	1.0	1.3	1.2	1.1	1.6	1.4	1.5	1.1	1.1	1.4
Chemistry	8.0	7.2	6.6	7.2	7.2	6.6	6.2	6.0	6.7	6.2	6.1	7.0	7.7	7.1	6.7
Physics	10.6	9.0	9.3	7.7	7.2	7.6	8.4	8.5	8.4	7.8	7.3	7.7	7.3	8.2	7.8
Physical sciences nec	1.5	1.4	1.8	0.9	0.7	1.1	1.9	1.6	1.9	1.4	1.3	1.0	1.1	0.8	0.7
Psychology	1.3	1.1	1.0	1.0	1.1	1.3	0.9	0.8	1.0	0.8	0.8	1.2	0.8	0.8	1.0
Social sciences	1.5	1.5	2.2	1.3	1.0	1.0	0.8	1.0	0.8	1.1	1.2	1.3	0.7	0.6	0.5
Economics	0.4	0.4	0.6	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Political science	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1
Sociology	0.3	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.3	0.1	0.1	0.1
Social sciences nec	0.6	0.7	1.0	0.8	0.5	0.5	0.5	0.6	0.4	0.8	0.9	0.9	0.5	0.4	0.3
Sciences nec	2.2	2.5	4.1	3.5	2.8	2.7	2.8	2.8	3.7	5.2	3.8	3.9	3.7	3.4	2.6
Engineering	18.5	21.7	21.9	21.3	21.4	21.2	20.8	23.4	24.3	23.5	23.2	24.4	24.2	25.9	28.1
Aeronautical/astronautical	1.0	1.3	1.4	1.4	1.4	1.2	1.2	1.1	1.3	1.3	1.9	1.4	1.7	1.5	1.7
Bioengineering/biomedical	NA	NA	NA	1.0	1.1	1.1	1.1	1.7	1.5	1.6	1.5	1.7	1.9	2.4	2.3
Chemical	1.6	1.8	1.8	1.8	1.8	1.8	3.0	2.2	2.4	2.2	2.2	2.6	2.5	2.5	2.7
Civil	1.5	2.0	1.8	2.0	2.5	1.7	2.1	1.9	1.9	1.9	1.9	2.0	1.8	2.3	2.1
Electrical	4.9	5.7	5.5	5.0	4.6	4.7	4.5	5.2	5.5	5.3	4.9	5.2	5.4	6.3	6.9
Mechanical	2.5	3.2	3.4	3.8	3.2	3.0	3.1	4.3	4.9	4.3	4.2	4.1	4.7	3.8	4.4
Metallurgical/materials	NA	2.7	2.3	2.1	2.4	3.4	2.1	2.8	3.1	3.1	2.8	3.1	2.4	2.4	3.0
Engineering nec	6.8	5.0	5.9	4.2	4.3	4.3	3.7	4.2	3.8	3.9	3.8	4.5	3.8	4.5	5.0

NA = not available; nec = not elsewhere classified.

NOTES: See appendix table 4-1 for gross domestic product implicit price deflators used to convert current dollars to constant 2005 dollars. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, Survey of Research and Development Expenditures at Universities and Colleges, and Higher Education Research and Development Survey.